CHAPTER NINE – WATER RECYCLING

LAW

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplied. To the extent practicable, the preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies and shall include all of the following:

10633 (a). A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

10633 (b). A description of the recycled water currently being used in the supplier's service area, including but not limited to, the type, place and quantity of use.

10633 (c). A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse determination with regard to the technical and economic feasibility of serving those uses, groundwater recharge, and other appropriate use…

10633 (d). The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years.

10633 (e). A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

10633 (f). A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems and to promote recirculating uses.

9.1 Water Recycling Programs

The City of Exeter and the businesses supplied by the City's water system employ minimal water recycling procedures. Municipal operations and local industry activities are not to the development level that would significantly impact the amount of City water supply from the groundwater basin. Although no formal water recycling plan is used, efforts are made to minimize the amount of groundwater use and maximize opportunities for groundwater recharge. This Plan section describes the existing and planned water recycling programs. [Checklist #44, §10633]

9.2 Existing City Wastewater Treatment and Recycling Facilities

The City of Exeter provides wastewater services to its residential, commercial, and industrial water users. The Waste Water Treatment Facility (WWTF) operates under Waste Discharge Requirement R5-2002-0062, issued by the RWQCB.

The WWTF directs secondary treatment effluent into effluent ponds where it is stored for ground percolation and evaporation. Groundwater recharge is the only form of water recycling used in the City. Although there are no direct economic benefits, groundwater recharge potentially reduces the depth of operation for local water wells.

The WWTF effluent ponds and the three storm water basins within the City serve as the City's primary source of groundwater recharge and reuse. The operations of the surrounding agricultural facilities serve as a secondary source of ground water recharge. Although no formal plans currently exist, efficient use of irrigation water is a necessity in running a cost effective agricultural business. Consequentially, groundwater recharge is a beneficial by-product of running effective agricultural facilities. No other water recycling operations are currently in place. [Checklist #49, §10633(e)]

9.3 Projected Recycling Usage

It is anticipated that the water recycled by local agricultural facilities with remain constant throughout the planning period. The City's recycled domestic effluent will increase proportionate to anticipated population growth.

As the State continues efforts to increase groundwater recharge and minimize water usage, the City will continue to evaluate and, as opportunities exist, implement effective practices to increase the amount of water recycling programs within the City. Currently, the majority of water used in and around the City is effectively discharged for groundwater percolation through basins or agricultural fields. There are no public or private facility operations that utilize a large enough quantity of water that would provide the opportunity to utilize a specific water recycling program. At this time, the development of any incentive program to encourage water recycling would be unproductive without the current existence of any facility to take part in such a program.

Future water recycling opportunities will be evaluated for new developments within the City. As the City grows in water usage, the City will look towards developing specific best management practices in regards to water recycling for all operations within the City's sphere of influence.

Table 9.3-1
Wastewater Collection and Treatment – AF Year[1]
[Checklist #45, §10633(a)]

Type of Wastewater	2000	2005	2010	2015	2020	2025	2030	2035	2040
Wastewater collected & treated in service area	1,039*	1,093*	1,202*	1,319	1,448	1,589	1,745	1,915	2,102
Volume that meets recycled water standard	1,039*	1,093*	1,202*	1,319	1,448	1,589	1,745	1,915	2,102

9.4 Other Water Conservation Practices

The City is aware of the importance of implementing good water conservation practices especially with the current condition of declining water resources within the State. Although not many opportunities for water recycling exist for an area with relatively low water consumption, the City of Exeter plans to responsibly manage local water resources through implementing other water conservation practices.

It is the intention of the City to follow water conservation efforts as indicated in Chapter Eight of the Water System Master Plan adopted by the City in September 2008 (Appendix M). These conservation efforts include continued use of water meters, xeriscape landscaping, and public education programs.

[1] Projected wastewater uses are based on actual treatment volumes* from Exeter's WWTP. The future volumes are projected using the anticipated growth rate of 1.88%.